AMENDMENTS TO THE CLAIMS

Please amend the claims as follows.

1. (Currently Amended) A method of schema replication in a directory server, comprising:
updating a schema at a replication supplier;
computing a change sequence number;
placing the change sequence number in an attribute on the replication supplier;
initiating a replication session to a replication consumer;
reading the change sequence number on the replication consumer;
updating the schema on the replication consumer to obtain a schema update if the change sequence number on the replication consumer is less than the change sequence number on the replication supplier; and
propagating ~~a~~ the schema update from the replication supplier to each replication consumer[[.]],
wherein the schema is a set of rules to constrain what is stored in the directory server and the schema comprises a schema entry associated with an attribute and an object class in the schema, wherein the schema entry comprises a private field describing a human readable description of the attribute and the object class.

2. (Original) The method of claim 1, further comprising:
replacing contents of a schema entry on each replication consumer with contents of a schema entry on the replication supplier.

3. (Currently Amended) The method of claim ~~3~~ 2, wherein contents are replaced using an update operation on the schema entry.

4. (Original) The method of claim 1, further comprising:
maintaining the schema on a master supplier server.

5. (Original) The method of claim 4, further comprising:
copying the schema to a plurality of servers after updating the master supplier.

6. (Original) The method of claim 1, further comprising:
holding the change sequence number on the replication consumer in an attribute.

7. (Original) The method of claim 1, further comprising:
querying the schema with standard Lightweight Directory Access Protocol operations.

8. (Original) The method of claim 1, further comprising:
modifying the schema with standard Lightweight Directory Access Protocol operations.

9. (Original) The method of claim 1, wherein the schema is updateable on an updateable master.

10. (Currently Amended) A method of schema replication in a directory server, comprising:
updating a schema at a replication supplier;
computing a change sequence number;
placing the change sequence number in an attribute on the replication supplier;
initiating a replication session to a replication consumer;
reading the change sequence number on the replication consumer;
updating the schema on the replication consumer to obtain a schema update if the change sequence number on the replication consumer is less than the change sequence number on the replication supplier;
propagating ~~a~~ the schema update from the replication supplier to each replication consumer;
replacing contents of a schema entry on each replication consumer with contents of a schema entry on the replication supplier;
maintaining the schema on a master supplier server;
copying the schema to a plurality of servers after updating the master supplier;
holding the change sequence number on the replication consumer in an attribute;
querying the schema with standard Lightweight Directory Access Protocol operations; and
modifying the schema with standard Lightweight Directory Access Protocol operations[[.]], wherein the schema is a set of rules to constrain what is stored in the directory server and the schema comprises a schema entry associated with an attribute and an object class in

the schema, wherein the schema entry comprises a private field describing a human readable description of the attribute and the object class.

11. (Currently Amended) A method of defining a schema in a directory server, comprising
identifying an object class in the schema;
placing the object class on an entry;
storing a data element in an attribute in the directory server used by the schema;
extending the schema with a new object class and a new attribute;
describing a document with a private field of a schema entry comprising a human readable description of the new object class and the new attribute; and
representing the data element as an attribute-data pair.

12. (Original) The method of claim 11, further comprising:
defining the object class in the directory server;
storing the object class in the directory server; and
maintaining integrity of the data element stored in the directory server is by imposing constraints on data values.

13. (Original) The method of claim 11, wherein the object class defines allowed attribute types and required attribute types.

14. (Original) The method of claim 11, wherein the attribute is multi-valued.

15. (Original) The method of claim 11, wherein the attribute is single-valued.

16. (Original) The method of claim 11, wherein the private field is a human-readable description.

17. (Original) The method of claim 11, wherein the attribute-data pair comprises a descriptive attribute associated with a data element.

18. (Original) The method of claim 11, wherein the entry in the directory server is customizable.

19. (Original) The method of claim 11, wherein the attribute available for the entry in the directory server is customizable.

20. (Currently Amended) A method of defining a schema in a directory server, comprising
identifying an object class in the schema;
placing the object class on an entry;
storing a data element in an attribute in the directory server used by the schema;
extending the schema with a new object class and a new attribute;
describing a document with a private field of a schema entry comprising a human readable description of the new object class and the new attribute;
representing the data element as an attribute-data pair;
defining the object class in the directory server;
storing the object class in the directory server; and
maintaining integrity of the data element stored in the directory server by imposing constraints on data values.

21. (Currently Amended) A computer system for schema replication a directory server, comprising:
a processor;
a memory; and
software instructions stored in the memory for enabling the computer system under control of the processor, to perform:
updating a schema at a replication supplier;
computing a change sequence number;
placing the change sequence number in an attribute on the replication supplier;
initiating a replication session to a replication consumer;
reading the change sequence number on the replication consumer;
updating the schema on the replication consumer to obtain a schema update if the change sequence number on the replication consumer is less than the change sequence number on the replication supplier; and

propagating ~~a~~ the schema update from the replication supplier to each replication consumer[[.]],

wherein the schema is a set of rules to constrain what is stored in the directory server and the schema comprises a schema entry associated with an attribute and an object class in the schema, wherein the schema entry comprises a private field describing a human readable description of the attribute and the object class.

22. (Original) The computer system of claim 21, wherein the software instructions further comprise instructions to perform:

replacing the contents of a schema entry on each replication consumer with contents of a schema entry on the replication supplier using an update operation.

23. (Original) The computer system of claim 21, wherein the software instructions further comprise instructions to perform:

maintaining the schema on a master supplier server.

24. (Original) The computer system of claim 21, wherein the software instructions further comprise instructions to perform:

copying the schema to a plurality of servers after updating the master supplier.

25. (Original) The computer system of claim 21, wherein the software instructions further comprise instructions to perform:

holding the change sequence number on the replication consumer in the attribute.

26. (Original) The computer system of claim 21, wherein the software instructions further comprise instructions to perform:

querying the schema with standard Lightweight Directory Access Protocol operations.

27. (Original) The computer system of claim 21, wherein the software instructions further comprise instructions to perform:

modifying the schema with standard Lightweight Directory Access Protocol operations.

28. (Currently Amended) An apparatus for replicating a schema in a directory server, comprising:

means for updating a schema at a replication supplier;

means for computing a change sequence number;

means for placing the change sequence number in an attribute on the replication supplier;

means for initiating a replication session to a replication consumer;

means for reading the change sequence number on the replication consumer;

means for updating the schema on the replication consumer to obtain a schema update if the change sequence number on the replication consumer is less than the change sequence number on the replication supplier; and

means for propagating ~~a~~ the schema update from the replication supplier to each replication consumer[[.]],

wherein the schema is a set of rules to constrain what is stored in the directory server and the schema comprises a schema entry associated with an attribute and an object class in the schema, wherein the schema entry comprises a private field describing a human readable description of the attribute and the object class.

29. (Currently Amended) An apparatus for defining a schema in a directory server, comprising:

means for identifying an object class in the schema;

means for placing the object class on an entry;

means for storing a data element in an attribute in the directory server used by the schema;

means for extending the schema with a new object class and a new attribute;

means for describing a document with a private field of a schema entry comprising a human readable description of the new object class and the new attribute; and

means for representing the data element as an attribute-data pair.

30. (Original) The apparatus of claim 29, further comprising:

means for defining the object class in the directory server;

means for storing the object class in the directory server; and

means for maintaining integrity of the data element stored in the directory server by imposing constraints on data values.